
In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (currently amended) A process for removing a thermal barrier ceramic coating from a cooling hole of a component comprising:

drilling cooling holes into the component after a bond coat application and prior to a thermal barrier ceramic coating application;

coating the component containing the cooling holes with the thermal barrier ceramic coating;

directing an air jet at a side of the component, opposing a surface having the thermal barrier ceramic coating, the jet containing a non-abrasive spherical particulate media and emitting the media from a nozzle of the jet at a low pressure wherein said low pressure is insufficient for the media to damage a substrate but said low pressure is sufficient for the media to remove the thermal barrier ceramic coating from the cooling hole; and

wherein a bond coating is interposed between the thermal barrier ceramic coating and the substrate; and

wherein the pressure of the air jet is from about 20 to 100 PSIG.

2. (canceled)
3. (canceled)
4. (currently amended) The process of claim 1 2 wherein the spherical media particles have a diameter of from about 0.002 to 0.010 inches.
5. (previously presented) The process of claim 4 wherein the media is glass beads.

6. (previously presented) The process of claim 1 wherein the component is a turbine engine component.
7. (previously presented) The process of claim 6 wherein the turbine engine component is a combustion chamber or related turbine engine component.
8. (currently amended) A process for removing a thermal barrier ceramic coating selectively from a cooling hole of a metallic turbine engine component consisting essentially of:

drilling cooling holes into the turbine component after a bond coat application and prior to a thermal barrier ceramic coating application;

coating the component containing the cooling holes with the thermal barrier ceramic coating;

directing an air jet at the cooling hole of the component, wherein the air jet is directed to a side, opposing a surface having the thermal barrier ceramic coating, the jet containing non-abrasive particulate spherical media and emitting the media from a nozzle of the jet at a low pressure wherein said low pressure is sufficient to selectively remove said thermal barrier ceramic coating yet insufficient for the media to damage an underlying metallic substrate of the cooling hole; and

wherein a bond coating is interposed between the thermal barrier ceramic coating and the metallic substrate; and

wherein the pressure of the air jet is from about 20 to 100 PSIG.

9. (canceled)
10. (canceled)
11. (currently amended) The process of claim 8 9 wherein the spherical media particles have a diameter of from about 0.002 to 0.010 inches.
12. (previously presented) The process of claim 11 wherein the media is glass beads.

13. (previously presented) The process of claim 12 wherein the turbine engine component is a combustion chamber or related turbine engine component.
14. (canceled)
15. (currently amended) The process of claim 8 9 wherein the air jet is directed at the cooling hole at substantially the same angle as the cooling hole.
16. (previously presented) The process of claim 8 wherein the air jet with the spherical media rounds the metallic edges of the cooling hole.
17. (previously presented) The process of claim 8 wherein the cooling holes are drilled into the turbine component using a laser drilling process.
18. (previously presented) A process for forming cooling holes on a thermal barrier ceramic coated turbine engine component comprising:
 - drilling cooling holes into the component after a bond coating application;
 - coating the component containing the cooling holes with a thermal barrier ceramic coating; and
 - directing an air jet at the cooling hole of the component, wherein the air jet is directed to a side of the component, opposing a surface having the thermal barrier ceramic coating, the jet containing non-abrasive particulate spherical media and emitting the media from a nozzle of the jet at a low pressure wherein said low pressure is sufficient to selectively remove said thermal barrier ceramic coating yet insufficient for the media to damage an underlying metallic substrate of the cooling hole; and
 - wherein the bond coating is interposed between the thermal barrier ceramic coating and the metallic substrate; and
 - wherein the pressure of the air jet is from about 20 to 100 PSIG.
19. (canceled)

20. (canceled)
21. (currently amended) The process of claim 18 ~~49~~ wherein the spherical media particles have a diameter of from about 0.002 to 0.010 inches.
22. (previously presented) The process of claim 21 wherein the media is spherical glass beads.
23. (previously presented) The process of claim 22 wherein the turbine engine component is a combustion chamber or related turbine engine component.
24. (canceled)
25. (previously presented) The process of claim 18 wherein the air jet is directed at the cooling hole at substantially the same angle as the cooling hole.
26. (previously presented) The process of claim 18 wherein the air jet with the spherical media rounds the metallic edges of the cooling hole.
27. (previously presented) The process of claim 18 wherein the cooling holes are drilled through the turbine component using a laser drilling process, wherein the cooling holes are drilled after bond coat application and prior to thermal barrier ceramic coating application.
28. (canceled)
29. (previously presented) The process of claim 1 wherein said bond coating is a MCrAlY coating and wherein M is selected from the group consisting of Ni, Co, Fe and mixtures thereof.
30. (canceled)
31. (canceled)
32. (previously presented) The process of claim 8 wherein said bond coating is a MCrAlY coating and wherein M is selected from the group consisting of Ni, Co, Fe and mixtures thereof.

- 33. (canceled)
- 34. (canceled)
- 35. (previously presented) The process of claim 18 wherein said bond coating is a MCrAlY coating and wherein M is selected from the group consisting of Ni, Co, Fe and mixtures thereof.
- 36. (canceled)
- 37. (previously presented) The process of claim 1, wherein said thermal barrier ceramic coating is not degraded or damaged.
- 38. (previously presented) The process of claim 8, wherein said thermal barrier ceramic coating is not degraded or damaged.
- 39. (previously presented) The process of claim 18, wherein said thermal barrier ceramic coating is not degraded or damaged.